

IN THE CLAIMS:

Please cancel claim 3 without prejudice and amend the following claims with the clean version provided immediately below to read as follows:

Sub C1
14. (Amended) A method for determining whether a substance binds GABA_B receptors and is thus a potential agonist or antagonist of the GABA_B receptor that comprises:

(a) providing cells comprising an expression vector encoding HG20 and an expression vector encoding GABA_BR1a or GABA_BR1b;

Sub C2
(b) culturing the cells under conditions such that HG20 and GABA_BR1a or GABA_BR1b are expressed and heterodimers of HG20 and GABA_BR1a or GABA_BR1b are formed;

(c) exposing the cells to a labeled ligand of GABA_B receptors in the presence and in the absence of the substance;

(d) measuring the binding of the labeled ligand to the heterodimers of HG20 and GABA_BR1a or GABA_BR1b;

where if the amount of binding of the labeled ligand is less in the presence of the substance than in the absence of the substance, then the substance is a potential agonist or antagonist of GABA_B receptors.

Sub C2
16. (Amended) A method of producing functional GABA_B receptors in cells comprising:

(a) transfecting cells with:

Sub C3
(1) an expression vector comprising DNA that encodes an HG20 protein under conditions favoring expression of HG20 in the cells; and;
(2) an expression vector comprising DNA that encodes GABA_BR1a or GABA_BR1b under conditions favoring expression of GABA_BR1a or GABA_BR1b in the cells;

(b) culturing the cells under conditions such that heterodimers of HG20 and GABA_BR1a or GABA_BR1b are formed where the heterodimers constitute functional GABA_B receptors.

18. (Amended) A method of expressing a truncated version of HG20 protein comprising:

(a) transfected a host cell with a expression vector that encodes an HG20 protein that has been truncated at the amino terminus, wherein said protein comprises the amino acid sequence selected from the group consisting of :

Positions 9-941 of SEQ ID. NO. 2
Positions 35-941 of SEQ.ID.NO.:2;
Positions 36-941 of SEQ.ID.NO.:2;
Positions 38-941 of SEQ.ID.NO.:2;
Positions 39-941 of SEQ.ID.NO.:2;
Positions 42-941 of SEQ.ID.NO.:2;
Positions 44-941 of SEQ.ID.NO.:2;
Positions 46-941 of SEQ.ID.NO.:2;
Positions 52-941 of SEQ.ID.NO.:2; and
Positions 57-941 of SEQ.ID.NO.:2;

(b) culturing the transfected cells of step (a) under conditions such that the truncated HG20 protein is expressed.

19. (Amended) A chimeric HG20 protein having an amino acid sequence of HG20 selected from the group consisting of:

Positions 51-941 of SEQ.ID.NO.:2;
Positions 52-941 of SEQ.ID.NO.:2;
Positions 53-941 of SEQ.ID.NO.:2;
Positions 54-941 of SEQ.ID.NO.:2;
Positions 55-941 of SEQ.ID.NO.:2;
Positions 56-941 of SEQ.ID.NO.:2;
Positions 57-941 of SEQ.ID.NO.:2; and
Positions 58-941 of SEQ.ID.NO.:2;

covalently linked at the N-terminus with a heterologous amino acid sequence.

Concluded

Please add the following new claim:

-- 20. A method of expressing a truncated version of HG20 protein comprising:
(a) transfecting a host cell with a expression vector that encodes an HG20 protein that has been truncated at the carboxy terminus, wherein said protein comprises the amino acid sequence defined by positions 1-480 as set forth in SEQ.ID.NO.:2;
(b) culturing the transfected cells of step (a) under conditions such that the truncated HG20 protein is expressed. --

STATUS OF CLAIMS

Claims 1- 19 were in the application.

Claims 1-5, 7-9, 14, 16, 18 and 19 were elected for prosecution on the merits further to a telephonic restriction requirement.

Claims 3, 8, 9, 14, 16, 18, 19 stand rejected for reasons of record in the Office Action.

Claim 3 has been canceled without prejudice. Claim 20 is newly added.

Claims 1, 2, 4-5, 7-9, 14, 16, 18-20 are presented for reconsideration.

REMARKS

Applicants affirm the provisional election with traverse of the invention of Group 1, claims 1-5, 7-9, 14, 16, 18 and 19 as noted in the instant Office Action. Claims 6, 10-13, 15 and 17 are withdrawn without prejudice to presenting said claims in a Divisional Application.

Applicants herein traverse and respectfully request reconsideration of the rejection of the claims as cited in the above referenced Office Action in view of the remarks set forth below. The objection to claim 14 is rendered moot in light of the amendment presented herein. The rejection of claim 3 under the First paragraph Section 112 is rendered moot in light of the present amendment.

A new Oath/Declaration is attached hereto as Exhibit 1 in accordance with the Examiner's requirement set forth on page 4 of the outstanding Office Action.

I. The Rejection of Claims 3, 16, 18, and 19 Under The Second Paragraph of 35 U.S.C. §112, Second Paragraph May Properly Be Withdrawn: